

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 11 JAN 2006

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Applicant's or agent's file reference METSO41PCTH5		FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/FI2004/000637		International filing date (day/month/year) 28.10.2004	Priority date (day/month/year) 28.10.2003	
International Patent Classification (IPC) or national classification and IPC D21H23/50				
Applicant METSO PAPER, INC. et al.				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand 27.05.2005		Date of completion of this report 10.01.2006		
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Karlsson, L Telephone No. +49 89 2399-8424		



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/FI2004/000637

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-7 as originally filed

Claims, Numbers

1-9 as originally filed

Drawings, Sheets

1/1 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
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International application No.
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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2-9
	No: Claims	1
Inventive step (IS)	Yes: Claims	
	No: Claims	1-9
Industrial applicability (IA)	Yes: Claims	1-9
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Re item V

1.1 The present invention refers to a spray coating unit, and its method, for treating a moving paper or board web with a treating agent, wherein the moving web enters a application chamber which is provided with spray nozzles. Additionally, water mist is sprayed into the application chamber.

1.2 D1:WO-A-020 72 953 discloses a spray coating unit for paper and board webs, comprising a application chamber which is embodied with spray nozzles and moist air or steam is additionally injected into said application chamber. Although D1 not explicitly mentions that a water mist is added to the application chamber of D1, it is disclosed that steam or moist air is blown into said application chamber. Moistened air may very well be in the form of a mist or a fog. In fact, the definition of the wording "mist" is very broad and just implies that it somehow can be visualized that water is present in e.g. the air. Therefore, it must be concluded that D1 inherently discloses the addition of a water mist into the Application chamber. Thus, the requirements of Article 33.2 PCT are not satisfied.

1.3 Furthermore, even if claim 1 would be considered to be formally novel due to the presence of water mist instead of moist air, it would in any case not be inventive. The difference between moist air, having a higher degree of water added thereto, and a very weak water mist is more or less non-existing, i.e. the borderline between a moist air and a water mist is floating. And, if there really would be a difference between moist air and water mist, it would be rather obvious for the skilled person, if necessary, to add the water content of the moist air to obtain water mist or fog. Therefore, the subject-matters of claims 1 and 8 would not necessarily involve an inventive step with regard to the disclosure of D1.

1.4 The separate features of the dependent claims do presently not appear to add any novel and inventive matter with regard to the disclosure of D1 and/or D2 (Art.33.2 and 33.3 PCT).

**INTERNATIONAL PRELIMINARY
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(SEPARATE SHEET)**

International application No.

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Re item VII

2.1 D1 and/or D2 should also be acknowledged in the description as representing closest prior art (Rule 5.1(a)(i)-(v) PCT).